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ONLINE DIALOGUE AND CRITICAL REFLECTION - IN AN INTERNATIONAL INCLUSIVE EDUCATION CONTEXT

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Abstract

This action research project was designed to structure and model critical pedagogies by using information technology and online dialogue to explore international perspectives on education and human rights issues. An online learning environment was designed in which self-directed dialogue and web based investigations provided a framework for final year education students to interrogate the nature of inclusion and diversity in international contexts. To achieve this aim, the research team designed a series of online information literacy seminars and complemented these with discussion forum activities. The online information literacy seminars provided structure for preservice teachers to interrogate world wide web resources in depth, to go beyond the mass media reporting of educational issues and to find the stakeholders 'voice' about international inclusive education contexts. The discussion forums were introduced to promote the establishment of collaborative learning communities, to provide students with the opportunity to interrogate the issues and findings of their research and to maximize the potential for critical reflection. This paper raises concerns about the effective use of online dialogues to raise critical reflection in higher education students.

Keywords

inclusion, international, information literacy, learning designs, online, higher education, collaboration, interrogation, authentic assessment

Background

This paper is based on an action research project which began with the desire to develop information technologies to structure and model critical pedagogies, in international perspectives, on education and human rights issues. The aim was to develop online dialogue between students to improve the skills of critical thinking in preservice teachers. Critical thinking skills are regarded as inherently valuable for beginning teachers because of the influence that the world wide web (WWW), technological innovations, communication technologies and the rapid rate of social change have had on educational contexts in Australian schools. All aspects of society are now pressured to respond in some way to internationalism, diversity and global issues. Similarly, preservice teachers are required to have the skills to interpret a range of stakeholder perspectives (Hobbs & Aspland, 2003). This creates serious and ongoing problems for higher education

teaching courses. Lauzon (2000), for example, describes the difficulty that universities have in maintaining currency with education units and courses in the context of rapidly changing world views, issues and opinions. Luke (2005) similarly warns against the replication of 1950's style higher education teaching degrees that are immediately redundant in the dynamic environment of school change. As such, it is becoming increasingly important for the higher education sector to develop critical thinking skills in preservice teachers so they are able to analyse changing international contexts to understand how diversity impinges on, and contributes to, local educational issues.

Teachers are called upon to critically interact with numerous cultural and social contexts. According to Barnett and Hallam (1999) this environment of "supercomplexity" is a feature of professional life. Higher education institutions, therefore, share a responsibility to build skills that enable teachers to work in complex communities with students, parents and colleagues who have different life experiences and expectations. Sugar and Bonk (1998, p. 131) claim that students "who learn in an environment where multiple and diverse perspectives are fostered and appreciated become better critical thinkers, better communicators, better problem-solvers and better team players". Critical thinking, lifelong learning and information literacy skills are necessary proficiencies for dealing with these supercomplex school environments.

At QUT, teacher practitioner attributes have been defined by the Faculty of Education as Educator Practitioner Attributes (Faculty of Education, 2005). In the Educator Practitioner Attributes high level skills in technology and information literacies are regarded as essential to lifelong learning. This project aimed to integrate information literacy skills with active learning techniques to create critical and reflective thinking about complex inclusive education contexts. The project was titled *International Perspectives on Diversity and Inclusion: Critical Pedagogies in Higher Education* and focused on the reconceptualisation of a core unit within the Bachelor of Education degree. The unit, called 'Inclusion and Diversity', investigates teaching philosophies and strategies associated with the inclusive curriculum. It is expected to have approximately nine hundred students enrolled in 2006, with one or two contact hours per week, and no face to face tutorial time.

In the supercomplex contexts of schools, the inclusive curriculum aims to maximise learning outcomes for all students in the class, particularly those students who have previously been marginalised or excluded. It cannot be assumed that an average preservice teacher from a privileged, white, middle class background may be able to inherently understand how school policies and processes tend to marginalise and exclude some groups of students. Enhancing critical reflection and active learning techniques provides preservice teachers with the skills required to interrogate educational contexts. Chickering and Ehrmann (2005) believe that the employment of active learning techniques demonstrates one of the principles of good practice in undergraduate education.

"Learning is not a spectator sport. Students do not learn much just sitting in classes listening to teachers, memorizing pre-packaged assignments, and spitting out answers. They must talk about what they are learning, write reflectively about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of themselves." (Chickering & Ehrmann, 1987, p. 4).

To reduce the possibility of replication of dominant culture perspectives, two important strategies were implemented in the project. In the first place, the project structured library seminars that stepped preservice teachers through successive levels of information searching so they were able to access a range and depth of perspectives about an international educational issue. Initially, the preservice teachers were encouraged to critically reflect on messages from mass media. Subsequent seminars encouraged them to identify the stakeholders in each issue and to search for resources on the world wide web to hear the (often silenced) opinions and perspectives of the stakeholders concerned.

Second, and most importantly to this paper, students were asked to share a dialogic relationship with their colleagues through discussion forums to challenge and critically evaluate the findings

and inferences they gained from their searches. In essence, we wished to “create learner-centred classrooms that require and ‘teach’ critical thinking” (Duffy, Dueber & Hawley, 1998, p. 53.) This paper focuses on the dialogic interactions between the preservice teachers in discussion forums and raises some concerns about the effectiveness of discussion forums in enhancing critical thinking in learners (Hall, 2002). Strategies to enhance online dialogue are suggested.

The success, or otherwise, of these strategies to enhance critical thinking in preservice teachers is important, not only to ensure that our future teachers have the inclusive perspectives that they need, but will also contribute to the work of other teacher educators. The research was prompted by a realisation that the unit as it stood was inadequate to develop the student outcomes of critical thinking that the faculty had identified in the Educator Practitioner Attributes. The team embarked on cycles of action research to investigate whether the two strategies described above would enhance critical thinking skills in this group of students.

Design

Action research was the methodology chosen for this project so that the research team could make critical reflections and informed choices at each iteration of the research process. As Kemmis (1999, p. 150) states, action research “aims to integrate the research act into the educational setting so that research can play a direct and immediate role in the improvement of practice.” At this stage of the project, there have been two cycles of action research in which decisions to progress, modify or maintain aspects of the research were informed by an analysis of the discussion forums, students’ assignment work and feedback from the students. Findings from the first two cycles of action research are outlined here, and recommendations for the third iteration of action research will be discussed in detail.

Assessment Design

Assessment is important because it defines students’ thinking about what is important and many authors believe that it is the single most important student motivation factor (Boud, 1988; Ramsden, 1988). “Put rather starkly: If you want to change student learning then change the methods of assessment” (Brown, Bull, & Pendlebury, 1997, p.7). In designing a new assessment item for this unit, the project team of unit coordinator and liaison librarians acknowledged the powerful role of assessment.

The new assessment item was a web based research assignment on international inclusive contexts and was marked using criterion referencing. It was an alternative assessment option for students undertaking the unit in 2005, although the assessment item will be compulsory for all students undertaking the unit from 2006 onwards. In this web based assignment, students were required to investigate and critically analyse an international, inclusive issue of their choice from resources on the internet and electronic databases, and discuss how the issue relates to their role as a beginning teacher in Queensland.

Assessing Critical Thinking

The assessment task requires preservice teachers to look at numerous perspectives of an issue and to critically reflect on the social constructs involved. Assessment was based on a rubric developed from the following criteria:

Criteria 1: Uses a problem solving or inquiry based approach to critically investigate an international human rights or social justice issue

Criteria 2: Critically scrutinises a range of perspectives and looks for the voice of the primary stakeholder

Criteria 3: Recognises the cultural and social contexts of issues

Criteria 4: Develops a dialogue of difference and articulates issues from non-dominant perspectives.

Criteria 5: Summarises a range of social, pedagogical or political perspectives related to the topic and analyses this information with a view to including all students in the learning experience and maximizing learning outcomes.

Research Cycle One: Designing Access to International Perspectives

Cycle one occurred during December-February 2004, and involved the design of a web based research assignment, which was an optional assessment item. This included a face-to-face information literacy session, jointly facilitated by academics and librarians, to provide some scaffolding for students undertaking the assignment. This scaffolding included asking students to identify and explore, through conversation, an international education issue. Analysis of feedback from the face-to-face session, and from the assignments, indicated that students required more structure. In particular, they needed further assistance to search comprehensively for the 'voice' of stakeholders, which is rarely represented in the mass media. The problem here was twofold. On the one hand, preservice teachers were unable to identify the stakeholders involved in each issue, thus demonstrating a limited notion of critical thinking. On the other hand, they did not have the search skills to investigate the topic in depth.

Research Cycle Two: The Move to the Online Learning Environment

The information literacy and critical thinking teaching which had been developed face to face, needed to be translated to an online learning environment in this next cycle of the action research project. This was because of the large numbers of students in the Semester 1 cohort, combined with limited resources of staff and physical space. The team developed online information literacy seminars, which used an inquiry-based approach to locating and evaluating a variety of international information sources, as an essential step in the critical thinking process. Incorporating feedback from the first action research cycle, these information literacy seminars were further structured with examples and searching steps. This was done by modelling the investigation of an international issue, from a novice perspective. The online modelling was reinforced in face-to-face lectures through the introduction of sample case studies. These case studies contextualised international issues within current local and national educational contexts.

The move to online was informed by the scholarly literature, including the use of active learning techniques to engage learners and encourage reflection. The use of active learning techniques aims to ensure that learners are "...motivated to interact directly with curriculum content, not merely gain exposure to it..." (Bicknell-Holmes & Hoffman, 2000, p.313). Opportunities for active learning were built into the design of this project, in order to promote critical thinking skills. These activities included "notepad" activities and discussion forum postings. Students were encouraged to record their reflections on the investigative process using the notepad facility. They were then asked to join a discussion forum related to their topic; and were required to make a minimum of two postings. These postings included identifying stakeholders for their topic, and sources of information. They then needed to critically reflect on the results of their investigative process. They were encouraged to, but not required to, engage with other students in the discussion forum.

The on-line information literacy seminars thus provided students with the structure for their final report of the issue under investigation and provided the data to complete the assignment. A model example was used in the seminars for all stages of the assignment. The contributions made to the reflective notepad were assessed at 10% while postings to the discussion forums were also assessed at 10%. Students were required to post two sets of information from their searches to the discussion forums, however, students were assigned higher marks if they made a comment about the complex inclusive context they were investigating or commented about topics that other people had chosen to investigate.

Results

Evidence for student participation in critical thinking was collected from discussion forum postings, the web based research assignment – completed by 52 of the unit’s students - and feedback from academic staff and liaison librarians.

Discussion Forum Postings and Assignment Marks

The assignment was designed to facilitate critical thinking skills amongst fourth year education students through the active learning processes of participation in online discussion forums and completion of the information literacy seminars. However, the quality of participation in the online discussion forums was substandard. Participation rates of students in the online discussion forum are presented in Table 1. Although postings were made by some students to elicit debate, the response rate was low, as indicated by threads consisting of a maximum of 2 or 3 postings. Thus, students generally did not actively challenge each other’s opinions or engage in debate in the discussion forum. While active participation was minimal, the discussion forums collectively garnered 5670 hits, indicating that students participated on a passive level via viewing the forums.

Forum topic	Number of posts	Threaded posts (avg. thread length)	Number of hits
Inclusion	35	6 (1.5)	1401
Students at risk	24	4 (1.5)	791
Disability	25	1 (2)	600
Gender	35	4 (1.5)	801
Social and emotional	12	0	515
Race and culture	33	6 (1.3)	1084
Learning difficulties	20	2 (1)	747

Table 1: Analysis of Discussion Forum Postings

Although all students passed the assignment, only 5 students out of 52 displayed a high standard of critical thinking. This was evidenced by incorporation of non dominant perspectives to create a dialogue of difference, and discussion of the relevance of international human rights issues to beginning Queensland teachers. Very few students were then able to step into the cultural divide to consider more general issues of diversity, and the majority of the 52 students merely voiced and reinforced their opinions rather than looking for the missing “voice” in their research topic.

An example of non dominant cultural perspectives was exemplified in the following statement:

“...Eurocentric view is pervasive. It determines what is ‘normal,’ it universalizes thought and claims to be the only truth. The end products of such a worldview have been detrimental for Aboriginal peoples. The Eurocentric dichotomy of the savage versus the civilized simply legitimizes its own worldview and domination over the ‘Other.’”

A dialogue of difference is showcased in the following statement:

“Throughout Afghanistan, girls have been explicitly excluded from the nation’s education system on the grounds of cultural and religious beliefs. In Queensland however, we are governed by legislation that requires all girls to attend school. Yet this does not mean that the inclusivity [sic] of girls in Queensland schools can be ignored, as a far more subtle form of exclusion can prevent girls from the education they have a right to receiving... implicit exclusion is much harder to identify as it is embedded in the systems and institutions that our communities are part of. This form of exclusion can influence the language that is employed, the content that is selected, as well as the social options and pressure that is asserted through institutions...”

Other students presented the opinions of dominant cultures without consideration of primary sources pertaining to the non-dominant culture:

“The issues addressed include inclusive education focusing on strategies to help these students gain maximum benefit from their educational setting, policies relating to inclusive education, what are the benefits and the impact of research on policy and differing teacher perceptions [opinions of parents or students with disabilities not acknowledged].”

Failure to place the international issue in the context of Queensland schools and/ or downplaying the seriousness of the issue for Queensland schools is illustrated in the following statement:

“It is also stated by the Aboriginal Drug and Alcohol Council (1998) that drug education concerning petrol sniffing is “limited to those communities where petrol sniffing occurs, as exposure to the unaware is not desirable. Therefore a beginning teacher should only deal with the issue of Petrol Sniffing if students are becoming exposed or are exposed to the exploits of Petrol Sniffing.” [Opinions of parents and students were not investigated]

Discussion

The aim of this study was to foster critical thinking via active learning within an online medium. Examination of the content of the discussion forum revealed limited active participation, however, the level of passive viewing was extensive. These findings may indicate that the initial research cycles were unsuccessful. However, the problem is not uncommon, as other studies have revealed similar findings. Fung (2004) studied discussion board participation within a community of Chinese online students. Only 30% of students used the discussion board, and only 2 students posted more than five messages. As in the current study, complex interactions within the discussion forum were rare. Passive participation levels were high in Fung’s study, as they were in our own project. Wang et al (2004) revealed that passive participation may lead to unsuccessful outcomes in online learning. Recently, educational researchers have aimed to improve participation rates amongst online learners. In a study by Woods (2002), it was found that discussion board participation increased when the lecturer sent group emails to all students. Thus lecturer involvement within the online community may facilitate participation by providing guidance in discussion topics.

The discussion forums were not moderated, although clear guidelines for participation in the discussion forums had been set at the beginning of Semester 1, 2005, and the project team did not have an official presence in the forums. This was a deliberate strategy, as the team expected students to participate as critical thinkers in their final year of study. The team members now feel that students required more explicit learning assistance, encouragement to interact and the opportunity to view examples of high level critical reflection and dialogue.

Student feedback from our project revealed that students in general had had some experience in using discussion forums and chat rooms, however some were a little concerned that their opinions would not be respected. More explicit guidelines are likely to be needed for discussion forum interactions, in the next iteration of this project. The challenge for the future for the QUT project team will be to turn the passive participation of students into active participation. There may need to be more structure provided for the online learning interactions through the discussion forum. However the need to elicit critical discussion from the students will need to be balanced against providing a set of “instructions” which students could perceive as enforcing a particular path, or a particular voice. A degree of moderation may need to be used, however the staffing issues may restrict team members’ ability to moderate discussions. A further literature review will inform how the online environment can change to increase critical thinking through online dialogue, whilst not imposing authority. This may include the work of authors such as Duffy, Deuber and Hawley (1998), who refer to academics taking on a mentoring role in order to “teach” critical thinking; and McWilliam (2005, p. 5), who suggests that teachers become co-creators of value, “in there doing and failing alongside students, rather than moving like Florence Nightingale from desk to desk or

chat room to chat room, watching over her flock, encouraging and monitoring”. Other modifications to the online learning environment will similarly be informed by the literature.

The third iteration of the action research cycle will occur in Semester 1, 2006, when the unit is offered in the reconceptualised BEd degree for the first time. The web based research assignment will become a compulsory assessment item and the estimated cohort is expected to comprise approximately nine hundred internal and external students. Students that were enrolled in Semester 1, 2005, had engaged with the process of finding information from a variety of sources that could inform their understanding of inclusivity. They were interested in finding these other perspectives, but found it hard to relate to their professional practice. However, this cohort of students did not display the expected skills in utilising this information to reflect on their own ethnocentricity, their own beliefs, and their professional practice as educators. The staff involved in this project had assumed that these skills had been developed earlier in previous units, and would be actively discussed by students. However this cohort have progressed through an old course structure which had acknowledged problems, and which has since been redesigned. Next year’s BEd student cohort, in Semester 1, 2006, are expected to have these skills better developed, as a result of their progression through the new BEd, which incorporates more of these types of reflective activities.

Limitations

The results discussed in this paper were drawn from analysis of the discussion forum postings and the completed web based research assignments and informal feedback. The results of this research are, naturally, limited by the small numbers of participants. However the nature of action research cycles allows us to continue to investigate our concerns, using evidence from scholarly literature, from students’ work, and from staff feedback. The magnitude of student enrolments next year has led consideration of a survey instrument to be provided to students at the start semester. This survey will gauge student confidence in using the online learning environment, as well as their initial perceptions of inclusion.

Conclusion

The development of the collaborative partnership between academic staff and the liaison librarians was an important component of the project. A key factor in the success of that partnership was a shared teaching and learning philosophy and clear channels of communication. The partnership was a significant benefit of the project. However, the project was a major undertaking for all staff involved and the amount of time required for the project had been seriously underestimated. There are long-term benefits, as the work done this year will be the basis of the compulsory assessment piece for approximately nine hundred students in the Semester 1, 2006 cohort.

As has been shown, the importance of critical thinking is recognised as a necessary attribute for beginning teachers. How this skill is developed is of vital importance to teacher educators. This project, in its use of active learning in an online environment, is developing an exemplar for use by other higher education institutions.

The aims of this project were to enhance critical thinking skills through online dialogue in an international inclusive education context. Students were provided with the opportunity to interrogate the issues and findings of their research, and to maximize the potential for critical reflection. In the third action research cycle, we will be investigating how to further facilitate critical analysis of the literature. The results of this project demonstrate that critical thinking (including inclusive thinking) has to be intentionally and explicitly taught and assessed, even with final year students. In addition, there needs to be a rethink of staff involvement in promoting student engagement. The results of the project have demonstrated that it is inadequate to rely solely on the provision of examples of other students’ work, as this encourages the mimicking of another’s voice and the repetition and reinforcement of personal opinion. Students must be encouraged to listen to and value voice and non-dominant perspectives.

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